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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,690	03/30/2004	Viorel N. Moga	DP-311055	4046
7590	09/07/2004		EXAMINER	
Jimmy L. Funke, Esq. Delphi Technologies, Inc. Legal Staff, Mail Code: 480-410-202 P.O. Box 5052 Troy, MI 48007-5052			LE, THANH TAM T	
			ART UNIT	PAPER NUMBER
			2839	
DATE MAILED: 09/07/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/812,690	MOGA, VIOREL N.	
	Examiner Thanh-Tam T. Le	Art Unit 2839	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 30 March 2004.
- 2a) This action is **FINAL**.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-17 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-17 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 30 March 2004 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/30/04.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 11 and claim 10, line 12, “the retention force being greater than the engagement force” is unclear. It’s not provided any specific about the amount of force.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 10, insofar as that can be understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Moga (6,358,071).

Regarding claims 1 and 10, Moga, figures 1 and 4, discloses an electrical spring connector assembly for electrically connecting a conducting case (8), having a predetermined terminal diameter, and a spark plug (5), the electrical spring connection assembly comprising:

- a base (17) having a securing aperture (17a) for receiving the conducting case therein to fixedly secure the electrical spring connector assembly within the conducting case;
- a leaf spring portion extending radially out from the base for receiving the spark plug therein, the leaf spring portion creating an engagement force, the spark plug must overcome to be positioned within the electrical spring connection; and
- a beam spring portion extending out from the leaf spring portion, the beam spring portion creating a retention force to retain the spark plug within the electrical spring connection assembly, the retention force being greater than the engagement force.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-6 and 11-14, insofar as that can be understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Moga (6,358,071).

Regarding claims 2 and 11, Moga disclose the instant claimed invention as described above except for the leaf spring portion defining a bend diameter smaller than the predetermined terminal diameter.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the leaf spring portion defining a bend diameter smaller than the predetermined terminal diameter, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), in order to secure the conducting case.

Regarding claim 3, Moga discloses the beam spring portion defining a beam diameter greater than the predetermined terminal diameter.

Regarding claims 4 and 12, a detent extending between the leaf spring and the beam spring portions.

Regarding claims 5 and 13, figure 4, the leaf and beam spring portions including a plurality of arms extending out from the base radially therefrom.

Regarding claims 6 and 14, each of the plurality of arms including a distal end.

7. Claims 7-9 and 15-17, insofar as that can be understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Moga (6,358,071) as applied to claims 1-6 and 11-14 above, and further in view of Bilezikjian (5,735,716).

Regarding claim 7 and 15, Moga discloses the instant claimed invention as described above except for each of the distal end matingly engages the conducting case.

Bilezikjian, figure 3, discloses electrical connectors (10 and 12) having housing (24) which is retained in an outwardly bent hook (44) of a sleeve (26). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Moga to have the housing and the sleeve, as taught by Bilezikjian, in order to secure the conducting case.

Regarding claims 8 and 16, Moga, figure 4, discloses each of the plurality of arms is spaced equidistantly from the base.

Regarding claims 9 and 17, Moga discloses the leaf spring portion including a bend extending out from the base that does not engage the conducting case.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh-Tam T. Le whose telephone number is 571-272-2094. The examiner can normally be reached on 7:30-5:00.
9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TC Patel can be reached on 571-272-2098. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TL.  
8/26/04

  
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T. Le